IT Acquisition Advisory Council (IT-AAC)

A non-partisan think tank, 501.C3

Agile Acquisition of IT/Cyber Capabilities

Leveraging non-traditional expertise and benchmarked standards of practices That exceed CCA & NDAA Section 804/933 Mandates

"It is not a great mystery what needs to change, what it takes is the political will and willingness, as Eisenhower possessed, to make hard choices -- choices that will displease powerful people both inside the Pentagon and out"
Former Defense Secretary Robert Gates

John Weiler, Managing Director, john@IT-AAC.org
Dr. Marv Langston, IT-AAC Vice Chair marv@langston.org
Kevin Carroll, IT-AAC Vice Chair, Kevin.Carroll@IT-AAC.org

Senior Exec Briefing Summary

Assuring Business Value from every IT $ Spent

- ❑ **Purpose**
- ❑ **Today's Situation**
- ❑ **Our Proposal to Assist**
- ❑ **Way Forward Recommendation**
- ❑ **Predictable Outcomes**

"Together, these steps will help to catalyze a fundamental reform of Federal IT, which is essential to improving the effectiveness and efficiency of the Federal Government" ***White House, OMB Director***

© 2008- 2010 All Rights Reserved

Think Tank Purpose

To provide the Decision Makers with an alternative set of resources, agile methods and IT expertise needed to assure rapid delivery of IT/Cyber capabilities to the war fighter

- **Just in Time Expertise -** (vs butts in seats) that taps a virtual pool of seasoned experts from non-profits, SDO, academia, NGOs, independent consultants and nontraditional advisors. Partner capabilities are best in class of; *capability analysis, innovation research, solution architectures, tech assessment, business case analysis, performance metrics, BPR.*

- **Standardized Decision Analytic Processes –** AF, Navy & BTA deemed AAM as measurable, repeatable and sustainable. Derived from commercial best practices maintained as an Open Source Offering (on GSA Schedule)

- **Innovation Research** – decision analytics templates that define the realm of the possible needed to avoid over specification. Reduces time/cost of TRLs as applied to Open Source and COTS. Risk mitigation via evidenced based research.

- **Change Management - Acquisition Workforce –** Workshops, Training and Mentoring services using IT-AAC's Grey Beards**.**

"You can't solve today's problems with the same thinking that got you there" ***Albert Einstein***

© 2008- 2010 All Rights Reserved

Understanding IT Acquisition Lifecycle

IT Acquisition Building Blocks:

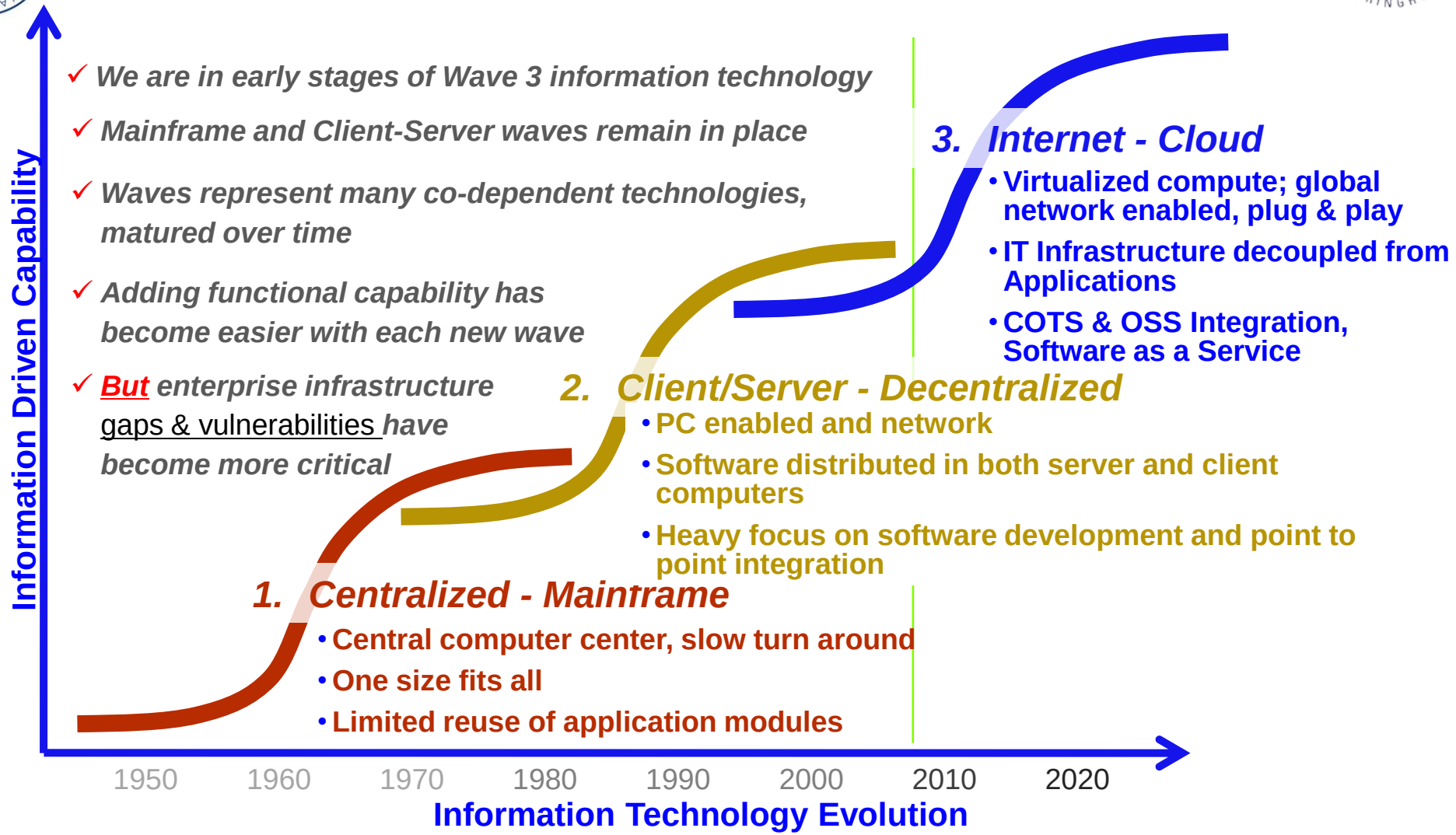
- **Governance and Oversight:** how an enterprise supports, oversees and manages IT programs and on-going portfolio. SOA as defined in the commercial market is governance tool not technology. DoD5000 and BCL represent the current approaches.
- **Decision Analytics:** enables effective Program Management and Value Stream Analysis execution. As most of these sub-processes are designed to improve decision making, a relative new discipline has evolved (since 86), that addresses the human and cultural challenges in decision making. Decision Analytics is the discipline of framing the essence and success criteria of each gate in the acquisition lifecycle. It brings focus to the high risk areas of a program, and reduces analysis/paralysis.
- **Requirements Development**: Actionable requirements must be constrained by the realm of the possible. With pressures to do more with less, we must embrace mechanisms that force a relative valuation/impact of the gap/capability, with clearly defined outcomes
- **Architecture:** This is one of the most critical elements of the acquisition lifecycle, as it should represent all stake holder agreements. The market embrace of SOA is not about technology, but a refocusing of the EA on service level management and data. A good architecture is a lexicon that links requirements, technologies and acquisition strategy.
- **Technology Assessment**: Understanding the limitation of technology early in the process is key. Without a clear view of the "realm of the possible" validated by real world results, we often find ourselves in high risk areas and over specification. Market research must be done early to help users constrain requirements and embrace the inherent business practices that codify. Recognizing that 70% make up of every IT application is vested in IT infrastructure (netcentric, cloud, SOA), it is critical to establish a common infrastructure/infrastructure standard by which all applications can share. The most prolific is ITIL to date.
- **Business Case Analysis**: Demonstrating the business value of technology investments, based on evidenced based research and lifecycle cost. This is a core requirement of Clinger Cohen Act.
- **Performance Based Acquisition and Metrics**: Software as a Service and SOA portent a new dynamic for acquisition of IT (health IT, cyber, business systems), that brings focus to Service Level Agreements (SLAs), Software as a Service (SaaS) and SL Management. If the previous activities do not directly feed the acquisition strategy or provide mechanisms for contractor accountability, all is lost.

"IT Reform is about Operational Efficiency and Innovation"

© 2008- 2010 All Rights Reserved

Cloud is driving new Acquisition Models

the Acquisition Assurance Method (AAM) is an enabler



DoD is using 1970s acquisition processes; to acquire Wave 3 IT capability

© 2008- 2010 All Rights Reserved

OMB's 25 Point Plan aligns with IT-AAC's Acquisition Reform Roadmap

Align the Acquisition Process with the Technology Cycle;

- *Point 13. Design and develop a cadre of specialized IT acquisition professionals .*
- *Point 14. Identify IT acquisition best practices and adopt government-wide.*
- *Point 15. Issue contracting guidance and templates to support modular development*
- *Point 16. Reduce barriers to entry for small innovative technology companies"*

"I want to thank <IT-AAC> for its significant contributions in helping my office develop our 25 Point Plan" Vivek Kundra, OMB CIO

© 2008- 2010 All Rights Reserved

Additional IT Acquisition Reform Laws

MilSpec must give way to Industry Best Practices: SOA, Agile, COTS

HR5136: ''Implementing Management for Performance and Related Reforms to Obtain Value in Every Acquisition''. Requires:

(1) Determine clear performance metrics for specific programs from the start;
(2) Foster an ongoing dialogue during the technology development process between the system developers and the warfighters;
(3) Promote an open architecture approach that allows for more modularization of hardware and software;
(4) Develop a plan for how to strengthen the IT acquisition workforce;
(5) Implement alternative milestone decision points that are more consistent with commercial product development for IT;
(6) Develop a process for competitive prototyping in the IT environment;
(7) Develop a new test and evaluation approach that merges developmental and operational testing in a parallel fashion;
(8) Place greater emphasis on the up-front market analysis; and
(9) Conduct a rigorous analysis of contracting mechanisms and contract incentive

Clinger Cohen Act Requires:

(1) Streamline the IT Acquisition Process
(2) Change business processes (BPR), not COTS
(3) Favor COTS/OSS over custom development.
(4) Build business case and acquire based objective assessment criteria
(5) Use architecture for investment decisions
(6) Adopt Commercial Standards and Best Practices

2010 Sec 804: *"The Secretary of Defense shall develop and implement a new acquisition process for information technology systems. The acquisition process developed and implemented pursuant to this subsection shall, to the extent determined appropriate by the Secretary--*

- *be designed to include– 1) early and continual involvement of the user; 2) multiple, rapidly executed increments or releases of capability; 3) early, successive prototyping to support an evolutionary approach; and 4) a modular, open-systems approach"*

2011 Sec 933: "*The Secretary of Defense, in consultation with the Secretaries of the military departments, shall develop a strategy to provide for the rapid acquisition of tools, applications, and other capabilities for cyber warfare for the United States Cyber Command and the cyber operations components of the military departments. The Strategy shall include:"*

- *Basic elements (1) An orderly process for determining and approving operational requirements. (2) A well-defined, repeatable, transparent, and disciplined process for developing capabilities to meet such requirements, in accordance with the information technology acquisition process developed pursuant to section 804 (3) The allocation of facilities and other resources to thoroughly test such capabilities.*
- *Establish mechanisms to promote information sharing, cooperative agreements, and collaboration with international, interagency, academic, and industrial partners in the development of cyber warfare capabilities*

© 2008- 2010 All Rights Reserved

OMB's View of Federal IT
Fundamentally Broken!

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

June 28, 2010

M-10-25

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Peter R. Orszag
Director, Office of Management and Budget

Rahm Emanuel
Chief of Staff

SUBJECT: Reforming the Federal Government's Efforts to Manage Information Technology Projects

Information technology (IT) has transformed how the private sector operates and revolutionized the efficiency, convenience, and effectiveness with which it serves its customers. The Federal Government has not taken full advantage of this transformation due to poor management of its technology investments. Too many Government IT projects cost hundreds of millions of dollars more than they should, take years longer than necessary to deploy, and deliver technologies that are obsolete by the time they are completed.

This Administration has begun to address these problems, and our early efforts – such as the IT Dashboard – are off to a good start. However, more remains to be done. The Administration is committed to fundamentally reforming the way the Federal Government manages IT projects so that we can lower costs and improve government performance. Accordingly, we direct the following actions:

- First, effective immediately, the Federal Chief Information Officer (CIO) will undertake detailed reviews of the highest-risk IT projects across the Federal Government. Agencies will be required to present improvement plans to the CIO for projects that are behind schedule or over budget. Where serious problems are identified and cannot be corrected, further actions should be taken, including potential adjustments to Fiscal Year 2012 agency budgets. Within 30 days, the CIO shall issue guidance on how this review process will be conducted.

- Second, concurrent with this memorandum, the Director of the Office of Management and Budget (OMB) is directing executive departments and agencies to refrain from awarding new task orders or contracts for financial system modernization projects – an area of persistent problems – pending review and approval by OMB. This guidance specifies the timing and parameters of the review process, including specific rules designed to significantly reduce the size, cost, and complexity of financial system modernization projects.

All Rights Reserved

Root Cause Analysis

distillation of over 40 Blue Ribbon Studies

1. **IT Acquisition Ecosystem Ineffective**; Wrong incentives, redundant oversight, missing metrics (MOE, SLA) puts focus on **compliance vs outcomes**. Programs spending up to 25% on compliance without any reduction in risk.

2. **Good laws not enforced** (CCA, OMB 119, FAR), compounded by **Ad-hoc Implementations and MilSpec methods.** DODAF, JCIDS, NESI, LISI were designed for Weapons Systems (by FFRDCs), compete with standards and orthogonal to Benchmarked Industry Best Practices.

3. **Conflict of Interest unenforced:** Contractors with vested interests in implementation use "Chinese firewalls" to bypass rules and gain unfair advantage and stifle innovation.

4. **Innovation Stifled**: Traditional SIs and FFRDCs are insulated from commercial IT innovations and best practices. DoD lack organic mechanisms for tapping innovations of the market, commercial expertise, or real world lessons learned. Public Service organizations (.edu, .org, SDOs) often left out of the equation.

5. **Current IT Processes in conflict with best practices and drive "design to spec" approach:** MilSpec Requirements (JCIDS), Architecture (DoDAF), Tech Assessment (TRL/C&A), Business Case (BCA) and Procurement (DoD5000) and Enterprise Management (CMM) processes are disconnected and inconsistent with fast paced IT market (violating Paperwork Reduction Act, CCA, and OMB A119)

6. **Budgeting (POM) approaches drive stove pipe solutions,** undermining ability to establish common & interoperable infrastructure services which accounts for 70% of every IT program buy. Concepts like SOA, Cloud Computing and Service Level Management cannot be embraced without a change in the above.

© 2008- 2010 All Rights Reserved

Critical Success Factors for Sustainable IT Acquisition Reform

Summary analysis suggests that an Agile Acquisition Ecosystem must have the following attributes;

- ☑ Embrace of Open and Agile IT Acquisition frameworks (per DSB report) already proven to meet challenges of the fast paced IT market (AAM is the only conforming todate)
- ☑ Dynamic access to evolving commercial innovations, implementation best practices and lessons learned (CCA)
- ☑ A bottom up view of commercial capabilities (realm of the possible) to prevent over specification and costly custom development
- ☑ Means of deriving SLAs from both Measures of Effectives and Standards of Practice
- ☑ Means of empowering and educating IT Program Management workforce via time proven expertise (Grey Beards)

© 2008- 2010 All Rights Reserved

IT-AAC Agile Acquisition Value Stream

Validates and aligns business drivers with proven interoperable IT Services

Business Requirements & Capability Gaps

Mission Need:
- MoEs
- Mission Prioritization
- Constraints

Service Specification
- Feasibility
- SOA Attributes
- SLAs
- Shared Services

Technology Fit/Finish:
- Selection
- Certification
- Interop Spec
- Openness

Value Stream Analysis ⇄ **Biz Process Re-Engineering**

Prioritized Business Requirements

Measurable Outcomes
Business Metrics

IT-AAC Communities of Practice

Industry CxOs

Innovators Vendors/ISVs

SDOs/Labs/ Universities

Evidence Lessons Learned | Innovations | Research, Testing Results

Proven IT Solutions

Solution Exist? Y / N

Align Proven Capabilities w/ business needs

Model New Solution

Knowledge Exchange

Service Oriented Specs and SLAs

Normalized Service Components

Solution Set Evidenced-Based Assessment

Validated Past Performance

Solution Architecture Validation and Demonstrations

Analysis of Alternatives N / Y

Vetted Solution Architecture

COTS Comparative Analysis, Evidence

Validated Acquisition Strategy, SLAs & Source Selection Criteria

© 2008- 2010 All Rights Reserved

IT-AAC Accomplishments

providing PMs with the resources and expertise for assured outcomes

1. Established an alternative, conflict free acquisition advisory in partnership with the country's top minds and 12 of most respected public service entities; INSA, ISSA, ICH, UofMD, UofTN, DAU, SSCI, AIA, OMG, FSTC,….
2. Completed Root Cause Analysis of Reoccurring Failure Patterns in Federal IT Acquisition and their devastating impact, derived from; over 40 major studies, 2 surveys, 121 interviews, 21 Leadership Workshops and 4 conferences.
3. Guided establishment of OMB's 25 Point Plan (13, 14, 15, 16 specifically)
4. Established a virtual Innovation Lab that integrates the testing and implementation results from many COIs
5. Successfully guided a high profile IT programs around the many pitfalls; Navy CANES, GSO FDSys, USMC Thin Client, AF E-FOIA, BTA E-Procurement, OSD HA SOA….
6. Standardized an Open & Agile IT Acquisition Decision framework that streamlines and informs; IT requirements, solution architecture, tech assessments, business case analysis, and source selection called the **Acquisition Assurance Method (AAM)**
7. First Acquisition Advisory to be awarded series of GSA FFP packages proven to assure acquisition outcomes
8. Established an robust IT Acquisition Training and Mentoring Curriculum for workforce empowerment.

"It is not a great mystery what needs to change, what it takes is the political will and willingness, as Eisenhower possessed, to make hard choices -- choices that will displease powerful people both inside the Pentagon and out" **Defense Secretary Robert Gates**

© 2008- 2010 All Rights Reserved

Typical IT-AAC Engagement

the ounce of prevention when failure is not an option

1. **Acquisition Readiness Assessment / Baseline Gap Analysis**: ID specific gaps in IT governance, architecture, acquisition lifecycle, and impact on agency mission objectives. (where is the pain)

2. **Facilitated Value Chain Analysis** (VCA) Working Groups: Establish Measure of Effectiveness, Stake Holder Agreements, and Relative Value of Competing Options. (stake holder value)

3. **Industry Benchmarking and Market research**: Closing the knowledge gap. Baseline real world metrics and service levels. Leveraging ICH's deep network of experts and expertise not available from traditional sources. (the realm of the possible).

4. **Program Gap Analysis**: What capabilities & services exist that can be readily leveraged (the known). ID and remediate high risk and over specification. (model success)

5. **Transformation Roadmap:** Evaluation of Alternatives using a Grey Beard Council that exposes real world expertise and lessons learned. (close the gap)

6. **Program Management Mentoring**: provide a pool of expertise and expertise on an as needed basis through out the entire SDLC. (drive cultural change)

© 2008- 2010 All Rights Reserved

Past Performance = Predicable Outcomes

when agencies leverage non-traditional methods and expertise!

Navy: Assessment of AFLOAT Program – CANES SOA & Security Strategy **Eliminated hi-risk Requirements by 23%, $100Ms in potential savings**	**USAF: Streamlined COTS Acquisition Process. Applied to Server Virtualization.** **Established optimal arch with ROI of 450% & $458 million savings**	**USAF: Procurement of E-FOIA System using AAM** **Completed AoA, BCA, AQ Selection in just 4 months.**
USMC: AoA and BusCase for Cross Domain, Thin Client Solutions **Greatly Exceeded Forecasted Saving in both analysis and acquisition**	**GSA: Financial Mgt System consolidation using AAM.** **Moved FMS from OMB "red" to "green". Eliminated duplicative investments that saved $200M**	**BTA: Assessment of External DoD Hosting Options using AAM** **$300 million in potential savings with minimal investment**
BTA: Apply AAM to complete AoA and BCA for DoD SOA Project **Reduced pre-acquisition cycle time and cost of Analysis by 80% (4 months vs 18)**	**GPO: Developed Acquisition Strategy for Future Digital System** **Led to successful acquisition and implementation on time, on budget and 80% cheaper than NARA RMS**	**JFCOM: MNIS Evaluation of Alternatives for Cross Domain Solutions** **Evaluated 100's of Options in 90 days, enabling stake holder buy in and source selection.**

". the concept of the Interoperability Clearinghouse is sound and vital. Its developing role as an honest broker of all interoperability technologies, no matter what the source, is especially needed. Such efforts should be supported by any organization that wants to stop putting all of its money into maintaining archaic software and obtuse data formats, and instead start focusing on bottom-line issues of productivity and cost-effective use of information technology." **OSD Commissioned Assessment of Interop. Clearinghouse (Mitre 2000)**

© 2008- 2010 All Rights Reserved

How Agencies Can Leverage IT-AAC

to achieve Sustainable IT Acquisition Reform

People

1. **Workforce Empowerment**: Establish robust IT Acquisition Training and Mentoring program with the IT-AAC that builds on DAU/IT-AAC Partnership. Build out Best Practices Clearinghouse with reusable acquisition decision templates and solution architectures already proven in the market

2. **Change Management**: Establish Incentives that bring focus to Outcomes with supporting Measures of Effectiveness and StakeHolder Forums that align IT with mission outcomes.

Technology

3. **Portfolio Assessment and Market research**: Identify the capability gap. Align with real world metrics and service levels that reflect the realm of the possible. Partner with non-profits, SDOs, and other public service entities that increase the aperture of innovation.

4. **Establish Shared Infrastructure Services**: Define core IT infrastructure capabilities & services that can be widely leveraged (shared services), via SOA, IT Infrastructure, Cloud Computing

Process

5. **Adopt Open Architecture and Agile Acquisition Processes:** Identify and eliminate legacy processes and policies that are no longer relevant to IT Acquisition outcomes. Establish streamlined set of methods & tools based on proven evidence to deliver.

6. **Transform Acquisition Ecosystem:** Streamline and integrate current IT Lifecycle Processes by focusing on outcome, metrics and decision analytics. Establish Technology Advisory Council or Grey Beard Council that improves transparency and leverages proven expertise.

© 2008- 2010 All Rights Reserved

Resource Optimization Considerations
why IT-AAC is needed

1. **FFRDCs:** Best suited for govt unique R&D and Weapons Systems Acquisition. Less effective in commercial IT applications, COTS integration efforts. FAR prohibits FFRDCs from partnering with industry or developing material solutions, including process standards.

2. **Standards Development Orgs (SDO), Trade Associations:** Source of standardizations among suppliers, ISVs. Effective source for market communications and outreach. Not effective when dealing with customer specific requirements, source selection, or architecture development due to anti-trust restrictions.

3. **Research Institutes, Labs & Academia:** Excellent source of low cost research, piloting of emerging technologies not yet proven in the market. Effective in IT & acquisition training. Limited access to commercial best practices or lessons learned.

4. **Consultancies, A&AS Firms:** Excellent for IV&V and source selection if free of vendor buy/sell agreements or implementation interests. Limited access to innovations of the market or real world best practices.

5. **Innovators, ISVs, Open Source Software:** The engine of innovation. Most effective and efficient way of filling common industry IT gaps. Great source of customer case studies and best practices. OCI restrictions prevent architecture or acquisition involvement unless involved via #2 & #3.

6. **System Integrators:** Optimized for large scale implementation and outsourcing. Have significant economies of scale and technology usability insights. FAR OCI rules prevent any support of project acquisition strategy, architecture or source selection efforts.

© 2008- 2010 All Rights Reserved

Resource Guide for Effective IT Acquisition
Based on Clinger Cohen Act and FAR Guidance

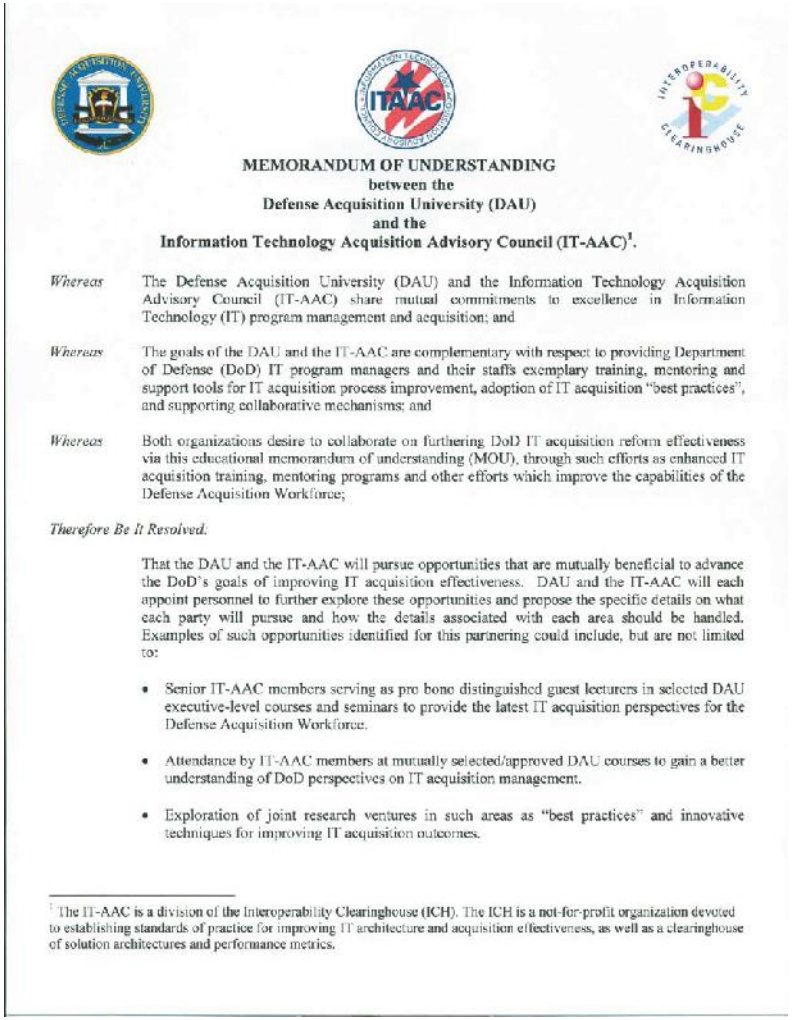
Partner Type / SDLC Phase	FFRDC	User Groups, Communities of Practice	Standards development orgs, trade associations	Research Institutes, Labs & Academia	Consultants, IV&V, A&AS Firms	Innovators, Tech Mfg, Open Source	System Integrators
Requirement, Gap Analysis	Only when no other company can support (4).	OMB Lines of Business offers Critical Role (6,7)	SDOs = Primary driver for open systems. Conflict free structures (2,3)	Provide Conflict free structure and economies of scale (2,6)	Limited access to industry lessons learned.	Great source for customer use cases, lessons learned.	FAR OCI Rules limit participation
Architecture and Planning, Mkt Research	Only when no other company can support (4)	Agency CxOs provides critical guidance (2, 3)	Provide standards of practice, not support	Principle source of expertise	Primary source of expertise	FAR OCI rules limit participation	FAR OCI rules prohibit direct support
PMO & IV&V Support	Only when no other company can support (4)	Not inherently governmental	Play supporting role	Optimized for this area	Key role	FAR OCI rules prohibit participation	FAR OCI rules prohibit participation
Material Solution Engineering	Forbidden (4)	Not inherently Governmental		Support role	Support role	Provide developmental	Primary partnership area
System Impl., Maint, & Support	Forbidden (4)	Not inherently Governmental	Forbidden	Lack Resources & Expertise	Internal IV&V for Prime contract reduces risk.	Provider of key technologies	Primary partnership area

BACKUP

Adapting Agile Acquisition Standards and Benchmarked Commercial Best Practices

© 2008- 2010 All Rights Reserved

Partner with DAU to create a Mentoring and Training Curriculum



MEMORANDUM OF UNDERSTANDING
between the
Defense Acquisition University (DAU)
and the
Information Technology Acquisition Advisory Council (IT-AAC)[1].

Whereas The Defense Acquisition University (DAU) and the Information Technology Acquisition Advisory Council (IT-AAC) share mutual commitments to excellence in Information Technology (IT) program management and acquisition; and

Whereas The goals of the DAU and the IT-AAC are complementary with respect to providing Department of Defense (DoD) IT program managers and their staffs exemplary training, mentoring and support tools for IT acquisition process improvement, adoption of IT acquisition "best practices", and supporting collaborative mechanisms; and

Whereas Both organizations desire to collaborate on furthering DoD IT acquisition reform effectiveness via this educational memorandum of understanding (MOU), through such efforts as enhanced IT acquisition training, mentoring programs and other efforts which improve the capabilities of the Defense Acquisition Workforce;

Therefore Be It Resolved:

That the DAU and the IT-AAC will pursue opportunities that are mutually beneficial to advance the DoD's goals of improving IT acquisition effectiveness. DAU and the IT-AAC will each appoint personnel to further explore these opportunities and propose the specific details on what each party will pursue and how the details associated with each area should be handled. Examples of such opportunities identified for this partnering could include, but are not limited to:

- Senior IT-AAC members serving as pro bono distinguished guest lecturers in selected DAU executive-level courses and seminars to provide the latest IT acquisition perspectives for the Defense Acquisition Workforce.
- Attendance by IT-AAC members at mutually selected/approved DAU courses to gain a better understanding of DoD perspectives on IT acquisition management.
- Exploration of joint research ventures in such areas as "best practices" and innovative techniques for improving IT acquisition outcomes.

[1] The IT-AAC is a division of the Interoperability Clearinghouse (ICH). The ICH is a not-for-profit organization devoted to establishing standards of practice for improving IT architecture and acquisition effectiveness, as well as a clearinghouse of solution architectures and performance metrics.

© 2008- 2010 All Rights Reserved

Sources of Evidence

Failure to fix IT is costing the tax payer $40Billion a Year

"*We are buying yesterday's technology tomorrow in the rare instances we are successful "*

- DSB IATF: "DoD reliance on FFRDCs is isolating it from sources of new technologies, and will hinder the departments ability to get the best technical advise in the future"
- AF Science Advisory Board 2000: PMs need greater access to real world lesson learned and innovations of the market to mitigate risk and cost overruns. PMs frequently enter high risk areas due to limited access to lessons learned from those who have already forged ahead.
- CMU SEI Study 2004: The DoDAF alone is not effective for IT architectures, lacks business view, performance metrics or means of avoiding over specification. DoDAF (C4ISR) was developed by Mitre and IDA in 1986 to provide DoD with a systems engineering documentation tool for existing system implementations. 2009 NDAA Sec 803 : Government needs a high integrity knowledge exchange by which innovations of the market can be objectively assessed.
- DSB 2009: Weapons Systems Style Solution Architecture and Acquisition Processes take too long, cost too much, recommend establishing a separate IT Acquisition market that is tuned for the fast paced market.
- IT-AAC 2009: Major IT Programs lack senior leadership support, and have few vested in the success. All participants, including oversight, must be incentivized in meeting program goals and outcomes.
- BENS RPT on ACQUISITION 2009: DoD needs independent architecture development that is not compromised by those with a vested interest in the outcome. FAR OCI rules must be better enforced.
- NDAA Sec 804 2010: DoD will establish a modular IT Acquisition process that is responsive to the fast paced IT market.

"Weapons systems depend on stable requirements, but with IT, technology changes faster than the requirements process can keep up," he said. "It changes faster than the budget process and it changes faster than the acquisition milestone process. For all these reasons, the normal acquisition process does not work for information technology." DepSec Bill Lynn statement at the 2009 Defense IT Acquisition Summit hosted by IT-AAC

© 2008- 2010 All Rights Reserved

Today's Situation -- as highlighted by the HASC Panel on Defense Acquisition Reform

Studies of both commercial and government IT projects have found some disturbing statistics;

- Only 16% of IT projects are completed on time and on budget.
- 31% are cancelled before completion.
- The remaining 53% are late and over budget, with the typical cost growth exceeding the original budget more than 89%.
- Of the IT projects that are completed, the final product contains only 61% of the originally specified features.

As was pointed out in testimony before the Panel, the traditional defense acquisition process is "ill-suited for information technology systems. Phase A is intended to mature technology; yet information technologies are now largely matured in the commercial sector". Weapon system acquisition processes are often applied to IT systems acquisition, without addressing unique aspects of IT. "the weapon systems acquisition process is optimized to manage production risk and does not really fit information technology acquisition that does not lead to significant production quantities." Defense Acquisition Panel, HASC

© 2008- 2010 All Rights Reserved

Assessment of Alternative IT Acquisition Processes

	MilSpec Acquisition Processes	Assessment against Sec 804 Criteria	Alternative Acquisition Process	Assessment against Sec 804 Criteria	Where successfully applied
Decision Analytics	Ad hoc, not formalized	Largest gap in IT Lifecycle	Acquisition Assurance Method (AAM)	Open, Successfully piloted, modular	AF, Navy, USMC, BTA, GSA, DISA,
Requirements Development	JCIDS, IT Box	Not tuned for COTS, SOA, OSS Market	Value Stream Analysis w/ Agile Development	Exceeds criteria	US TRANSCOM, DISA, CIA
Architecture	DoDAF Systems Engineering Method	Missing Metrics, Infrastructure View, Stake holder perspectives	OMB FEA RMs SEI SMART	Strong evidence, Services Based	PTO, DOC, GPO, GSA, DOI, DOT, DHS
Technology Assessment:	TRL Assessment	IT Matures at a very fast rate	AF Solution Assessment Process (ASAP)	COTS/OSS Focused, support BPR	AF, USMC, BTA, Navy CANES, PTO, GPO, GSA
Risk & Cost Management	Analysis of Alternatives,	Time consuming, not aligned with industry B.P.	ASAP/AAM BCA BTA ERAM	Effective w/ COTS based sys Limited risk mgt	AF, Navy, USMC, BTA
Governance and Oversight	DoD 5000 Bus Capability Lifecycle (BCL)	Milestone based, not effective for IT	ICH Clinger Cohen Act Guide	Integrated SOA best practices	BTA, OSD HA, Navy,

© 2008- 2010 All Rights Reserved